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TITLE

RUBBER COMPOSITE AND

PNEUMATIC TIRE USING THE SAME

 $\begin{array}{c}
O \\
Y - A - C NHN = C \\
R_B
\end{array}$

(COOH) m

COXR'),

I

П

III

_O H

CNHN = C

ABSTRACT :

PROBLEM TO BE SOLVED: To increase abrasion resistance while ensuring low heat characteristics, by adding to a rubber component a specific quantity of carbon black having equal to or greater than predetermined values of nitrogen absorbing specific surface area and dibutyl phthalate oil absorption, a specific formula of aromatic polycarboxylic derivative, and specific type of hydrazide compound, respectively.

SOLUTION: To approximately 100 wt. parts of rubber component composed of natural rubber and/or diene-based synthetic rubber is added 42-65 wt. parts of carbon black having 120 m2/g or more of nitrogen absorbing specific surface area and 110 ml/100 g or more of dibutyl phthalate oil absorption, 0.2-3.0 wt. parts of at least one from a group of aromatic polycarboxylic derivatives expressed with expression I, and 0.2-2.0 wt. parts of at least one from a group of hydrazide compounds expressed with expression II or formula III. The aromatic polycarboxylic derivative expressed with expression I acts as a reactive plasticizer. By using the above carbon black, both an increase in abrasion resistance and restriction of heat build-up are achieved.

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